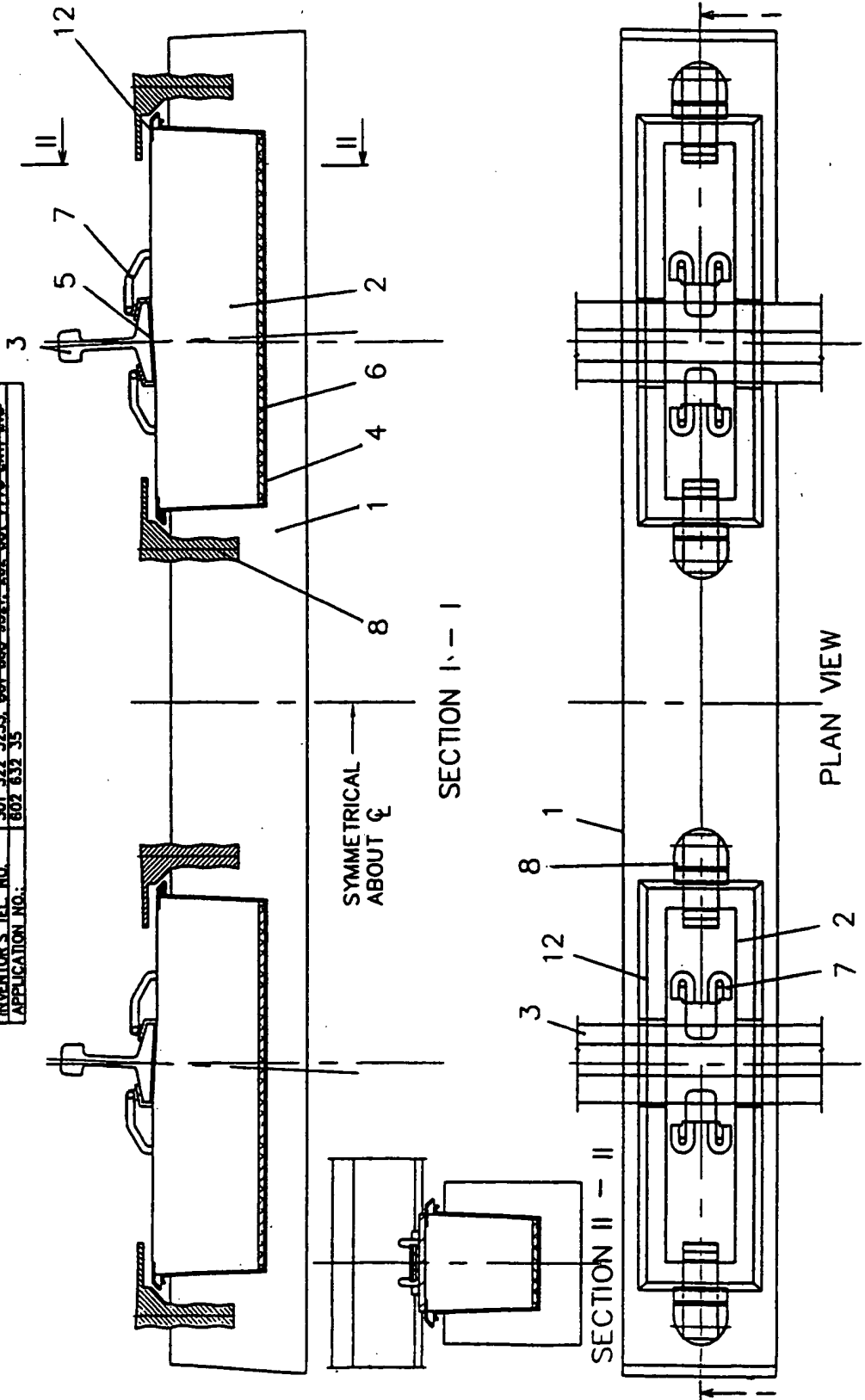




TIE BLOCK RETAINER AND TIE BLOCK SLEEVE
(FOR RAILWAY TIES WITH INSERTED BLOCKS)

| | |
|------------------------|---|
| TITLE OF THE INVENTION | INTERNALLY-RESILIENT TIE FOR RAILWAY TRACK |
| INVENTOR'S NAME | JAN H. ZICHIA, P.E. |
| INVENTOR'S TEL. NO. | 501 322 5233, 800 988-9381, 800 331 7776 EXT. 303 |
| APPLICATION NO. | 802 632 35 |

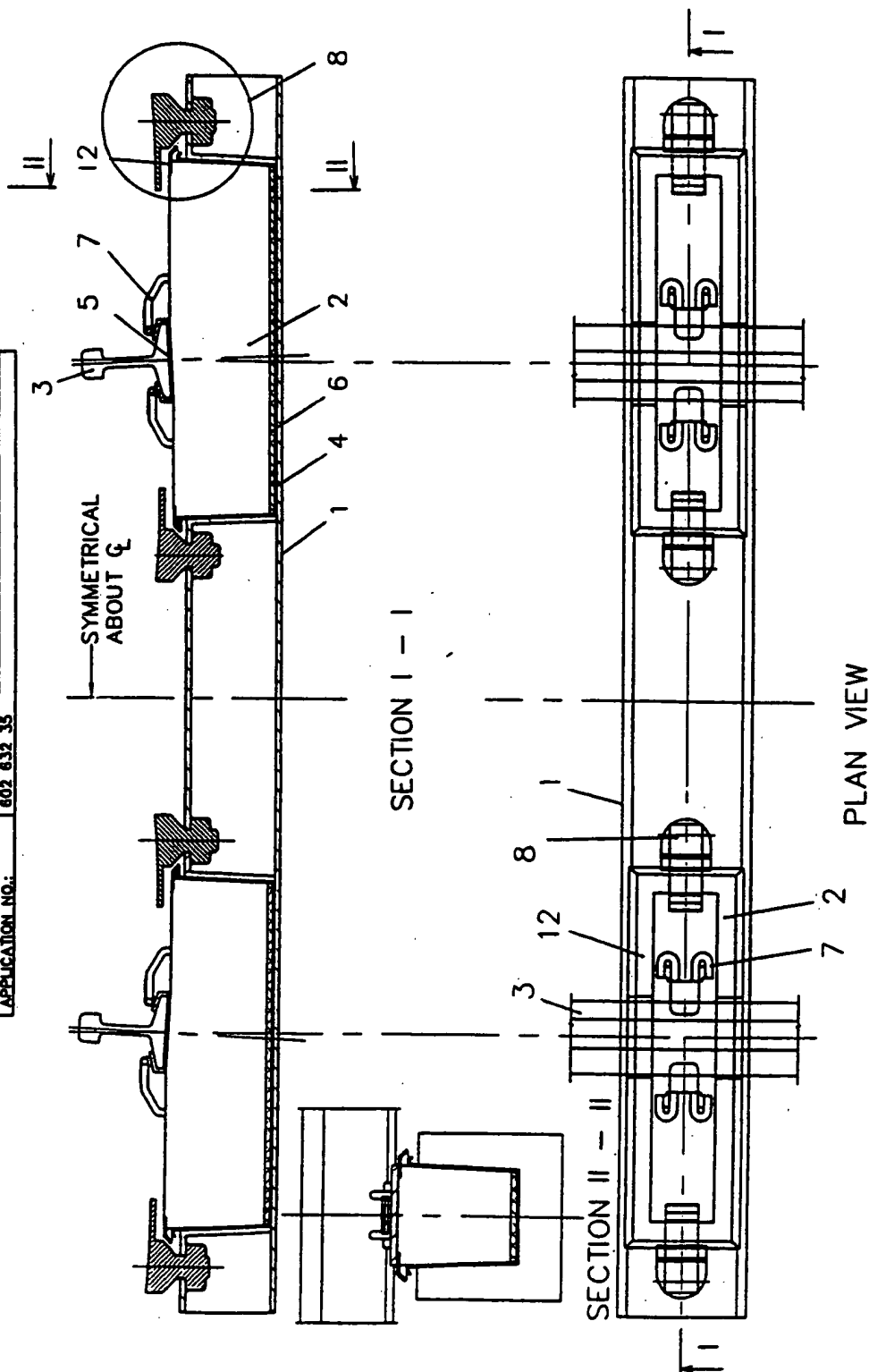


INTERNALLY-RESILIENT TIE WITH INDEPENDENT BOOTED BLOCKS AND CONCRETE CASE
NOT TO SCALE

Fig. 1

TIE BLOCK RETAINER AND TIE BLOCK SLEEVES
(FOR RAILWAY TIES WITH INSERTED BLOCKS)

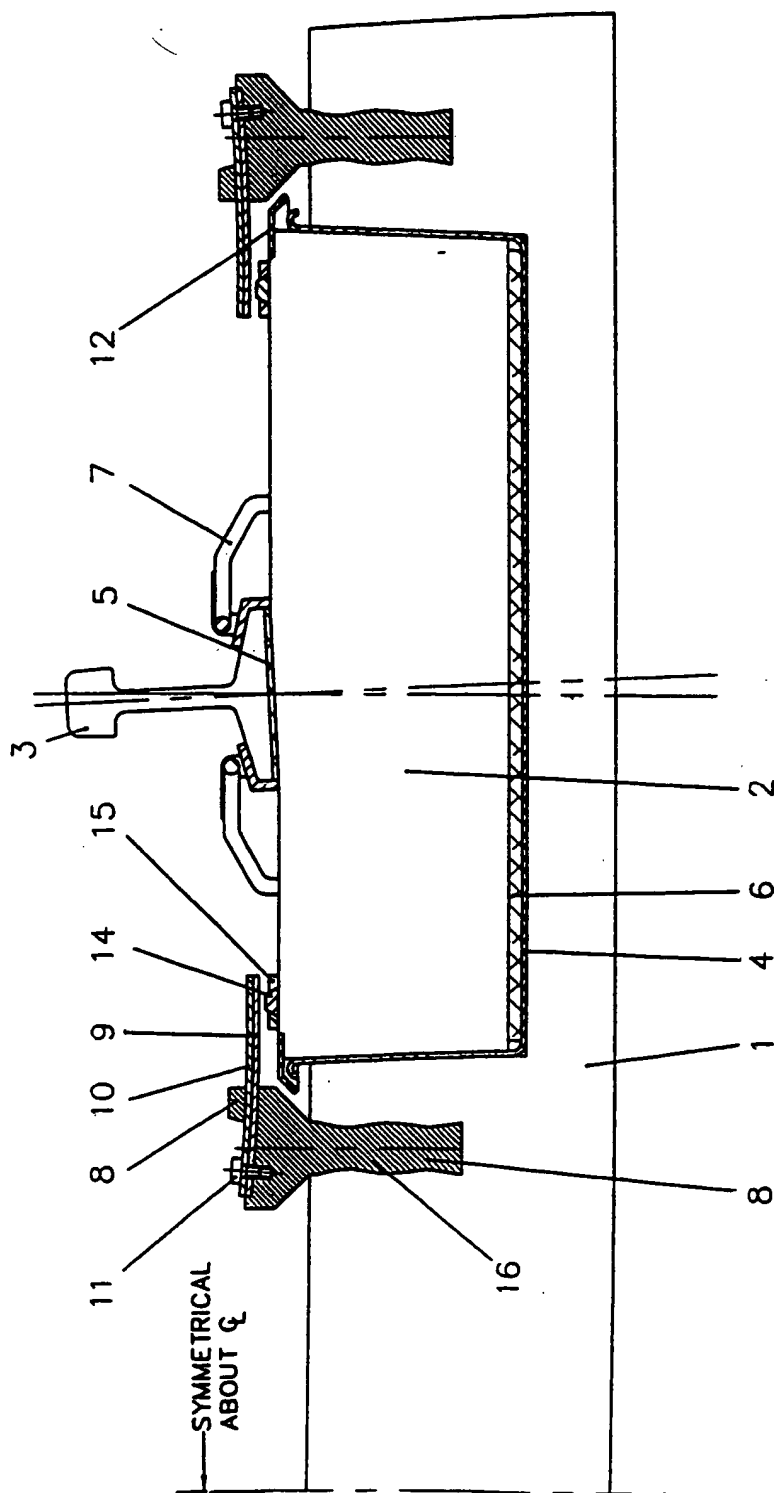
| | |
|------------------------|---|
| TITLE OF THE INVENTION | INTERNALLY-RESILIENT-TIE-FOR-RAILWAY-TIE-RETAINER |
| INVENTOR'S NAME | JAN H. ZICH, P.E. |
| INVENTOR'S TEL. NO. | VO 122 5711 301 408-8341 203 341-7778 EXT. 212 |
| APPLICATION NO. | 602 832 33 |



INTERNALLY-RESILIENT-TIE-WITH-INDEPENDENT-BOOTED-BLOCKS-AND-STEEL-CASE
NOT-TO-SCALE

Fig. 2

| | |
|------------------------|---|
| TITLE OF THE INVENTION | INTERNALLY RESILIENT HE FBR RAILWAY TRACK |
| INVENTOR'S NAME | JAN H. ZICHA, P.E. |
| INVENTOR'S TEL. NO. | 501 322 5133, 501 608 0361, 501 331 7736 EXT. 612 |
| APPLICATION NO. | 602 632 35 |



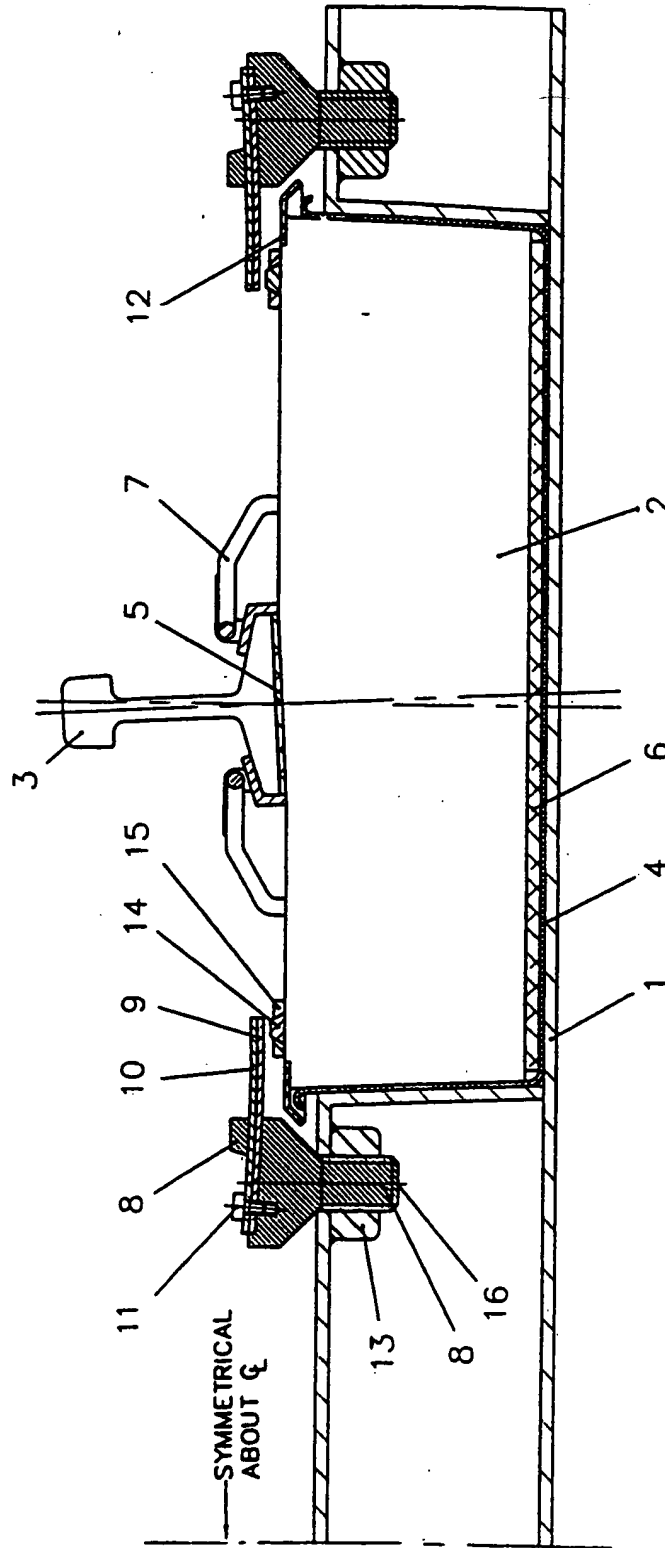
DETAIL OF SECTION I - SHOWING BLOCK RETAINER OF FIG. 1

~~INTERNALLY RESILIENT TIE WITH INDEPENDENT BOOTED BLOCKS AND CONCRETE CASE
NOT TO SCALE~~

Fig. 3

TIE BLOCK RETAINER AND TIE BLOCK SLEEVE
FOR RAILWAY TIES WITH INSERTED BLOCKS

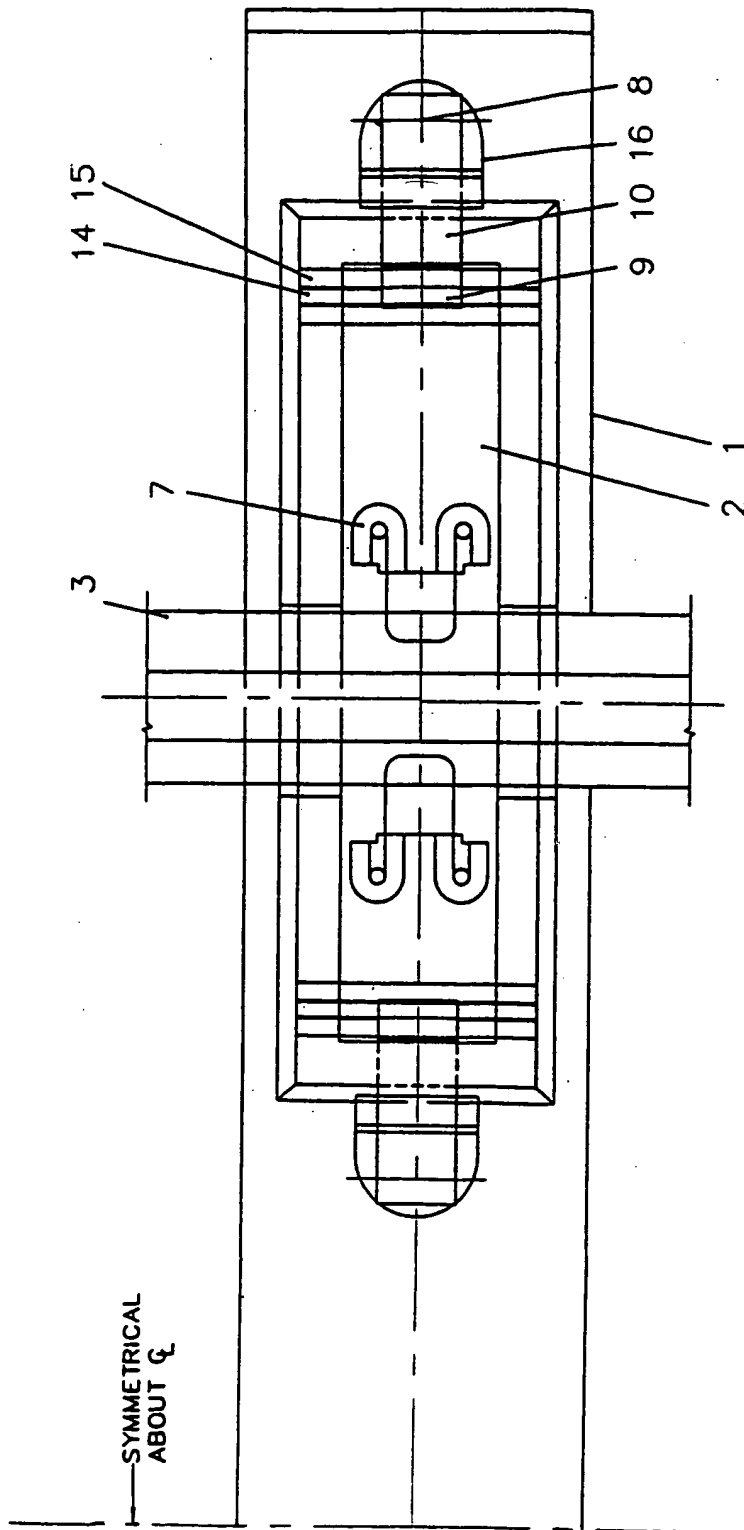
| | |
|------------------------|---|
| TITLE OF THE INVENTION | INTERNALLY-RESILIENT TIE FOR RAILWAY TRACKS |
| INVENTOR'S NAME | JAN H. ZUCHA, P.E. |
| INVENTOR'S TEL. NO. | 501 322 5733, 501 401 4300, 503 341 3334, 501 813 |
| APPLICATION NO. | 802 832 35 |



DETAIL OF SECTION I - I SHOWING BLOCK RETAINER OF Fig. 2
INTERNALLY-RESILIENT TIE WITH INDEPENDENT BOOTED BLOCKS AND STEEL CASE
NOT TO SCALE
Fig. 4

TIE BLOCK RETAINER AND TIE BLOCK SLEEVE
(FOR RAILWAY TIES WITH INSERTED BLOCKS)

| | | |
|------------------------|--|---|
| TITLE OF THE INVENTION | | INTERNALLY RESILIENT TIE FOR RAILWAY TRACK |
| INVENTOR'S NAME | | JAN H. ZUCHA, P.E. |
| INVENTOR'S TEL. NO. | | 301 372 5233, 401 698 9367, 408 331 7776-EXT. 244 |
| APPLICATION NO. | | 602 832 35 |



PLAN VIEW RELEVANT TO BLOCK RETAINERS OF Fig. 1 AND Fig. 2

~~INTERNALLY RESILIENT TIE WITH INDEPENDENT
BOOTED BLOCKS AND CONCRETE OR STEEL CASE
NOT TO SCALE~~ Fig. 5